REMARKS

Claims 1-14 and 16-65 are in the application.

Claims 15-16 and 32-65 are cancelled.

Claims 1-14 and 17-31 are pending in this application.

Claims 1-14 and 16-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,723,635 to Ngo et al., hereinafter "Ngo et al.", in view of U.S. Patent No. 6,797,605 to Goh et al., hereinafter "Goh et al.".

Claim 16 has been canceled. Therefore the rejection thereof is moot.

Applicants have amended claim 1 to define a dual damascene interconnect structure in which:

(1) the second thin non-porous low-k dielectric layer has a composition that is covalently bonded with the first non-porous via level low-k dielectric layer and the first porous low-k line level dielectric layer for enhanced adhesion; and

(2) the second thin non-porous low-k dielectric layer is selected from the group consisting of: HOSP™, HOSP BESt™, Ensemble™ Etch Stop, Ensemble™ Hard Mask, AP 6000™, organo silsesquioxanes, hydrido-organo silsesquioxanes, siloxanes, silicon oxides, SiLK™, GX-3™ and a combination thereof.

On page 8, first paragraph, the office action states:

"Ngo e al. clearly disclose that the thin non-porous low k dielectric layer 20A for coating and planarizing the line and via sidewalls; wherein the thin non-porous low k dielectric layer 20A is selected from the group consisting of silicon carbides..."

Applicants acknowledge that Ngo e al. indeed disclose a thin non-porous low k silicon carbide dielectric layer 20A for coating and planarizing the line and via sidewalls. However, applicants also point out that silicon carbide can not covalently bond. Accordingly, applicants have removed silicon carbide from the list of materials that were recited in the now canceled claim 16 along with hydrido silsesquioxanes, which also can not covalently bond.

Thus, claim 1, as amended, recites:

"wherein said second thin non-porous low-k dielectric layer is selected from the group consisting of: HOSP™, HOSP BESt™, Ensemble™ Etch Stop, Ensemble™ Hard Mask, AP 6000™, organo silsesquioxanes, hydrido-organo silsesquioxanes, siloxanes, silicon oxides, SiLK™, GX-3™ and a combination thereof."

Unlike silicon carbide, all of the materials recited herein above in claim 1, as amended, can covalently bond.

Neither Ngo nor Goh, whether considered alone or in combination, teach or suggest the elements of claim 1. Further, neither Ngo et al. nor Goh et al., has all the elements recited in instant claim 1, as amended. In addition, the combination of Ngo et al. and Goh et al. does not have all the elements of claim 1, as amended.

Therefore, a *prima facie* case of obviousness has not been established.

Claims 2-14 and 17-31 depend directly or indirectly from claim 1 and, as such, claims 2-14 and 17-31 are also patentable over the cited art.

In view of the foregoing, the rejection of claims 1-14 and 16-31 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,723,635 to Ngo et al. in view of U.S. Patent No. 6,797,605 to Goh et al. should be withdrawn and claims 1-14 and 16-31 should be allowed.

Accordingly, applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-14 and 17-31 and allowance of claims 1-14 and 17-31.

An early indication of the allowability of all pending claims is earnestly solicited.

Respectfully submitted,

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